CLAIMS:

1. A method of controlling a set of transcoding channels (TC[1] to TC[n]), a transcoding channel (TC[i]) allowing an input compressed data signal (ICS[i]) encoded at an input bit rate (Rin[i]) to be converted into an output compressed data signal (OCS[i]) encoded at an output bit rate (Rout[i]), said method of controlling comprising :

a step of computing an indicator of a compressed data quality for the respective transcoding channels, said indicator being computed from the input compressed data signal (ICS[i]),

a step of allocating the output bit rate (Rout[i]) to the transcoding channel (TC[i]) from a total output bit rate (Rtot), its corresponding indicator and a sum of the indicators of the transcoding channels.

2. A method of controlling a set of transcoding channels as claimed in claim 1, wherein the indicator is computed from an average, over a set of encoded pictures, of a function of an average quantization scale over a picture and a number of bits used to encode the same picture.

3. A method of controlling a set of transcoding channels as claimed in claim 2, wherein the indicator is computed from a weighted average of a set of the averages calculated over the set of encoded pictures.

4. A controller (CONT) for controlling a set of transcoders (TC[1] to TC[n]), a transcoder (TC[i]) allowing an input compressed data signal (ICS[i]) encoded at an input bit rate (Rin[i]) to be converted into an output compressed data signal (OCS[i]) encoded at an output bit rate (Rout[i]), said controller comprising :

means for computing an indicator of a compressed data quality for the respective transcoders, said indicator being computed from the input compressed data signal (ICS[i]),

means for allocating the output bit rate (Rout[i]) to the transcoder (TC[i]) from a total output bit rate (Rtot), its corresponding indicator and a sum of the indicators of the transcoders.

5. A data multiplexing system comprising :

a set of transcoders (TC[1] to TC[n]) for converting input compressed data signals (ICS[1] to ICS[n]) encoded at an input bit rate (Rin[1] to Ri[n]) into output compressed data signals (OCS[1] to OCS[n]) encoded at an output bit rate (Rout[1] to Rout[n]),

a controller (CONT) for controlling the set of transcoders and comprising :

means for computing an indicator of a compressed data quality for the respective transcoders, said indicator being computed from the input compressed data signal (ICS[i]),

means for allocating the output bit rate (Rout[i]) to the transcoder (TC[i]) from a total output bit rate (Rtot), its corresponding indicator and a sum of the indicators of the transcoders,

a multiplexer (MUX) for providing a multiplexed data signal (MS) at the total output bit rate (Rtot) by multiplexing of the output compressed data signals (OCS[1] to OCS[n]).

6. A computer program product for a controller (CONT) that comprises a set of instructions, which, when loaded into the controller, causes the controller to carry out the method of controlling as claimed in claims 1 to 3.